Gulf of Mexico Harmful Algal Bloom Bulletin

1 October 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: September 27, 2007

Conditions Report

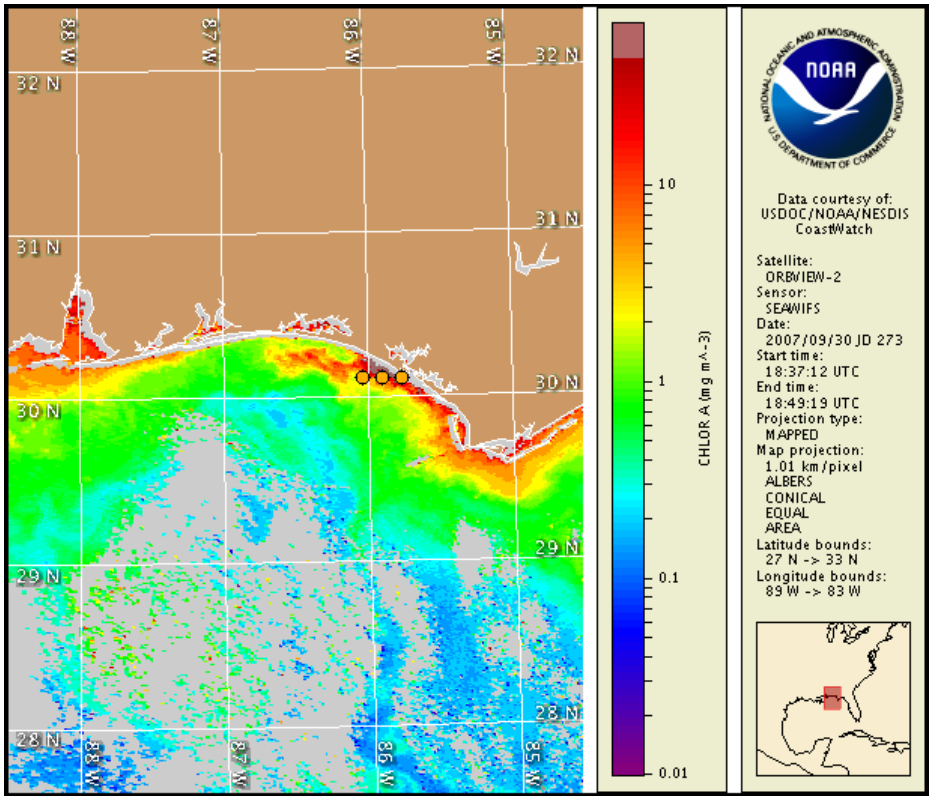
A harmful algal bloom has been identified in Bay and Walton counties. Patchy very low impacts are possible in Bay and Walton counties today through Wednesday, October 3. Harmful algae have been identified in St Joseph Bay, Gulf County. No respiratory impacts are expected in Gulf County today through Wednesday.

Analysis

A harmful algal bloom has been identified in Bay and Walton counties. Recent sample results indicate medium concentrations of *Karenia brevis* south of Bay and Walton counties (FWRI; 9/26). Low a concentrations of *K. brevis* were found at St. Andrew Pass in Bay County (FWRI; 9/28). No *K. brevis* has been reported elsewhere in the Florida Panhandle. Satellite imagery shows a region of high chlorophyll (> 10 μg/L) from 30°14.5'N 86°3.4'W (south of eastern Walton County) to 29°53.7'N 85°27.9'W (south of the Bay/Gulf County border). Elevated chlorophyll levels (2-10 μg/L) are present west of the St. Joseph Peninsula with a high chlorophyll patch centered at 29°47.8'N 85°28.6'W. Reports of dead fish, discolored water and respiratory irritation have been received from Bay and Walton counties (FWRI; 9/27-28). Continued sampling is recommended.

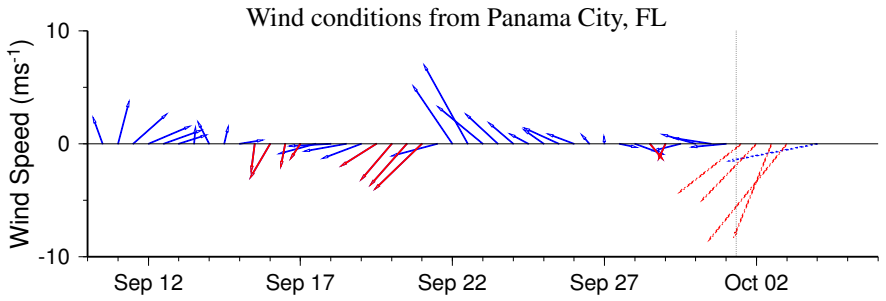
Offshore winds will decrease the potential for impacts at the coast today through Wednesday. Strong upwelling conditions increase the potential for bloom intensification Tuesday and Wednesday.

Urizar, Fisher



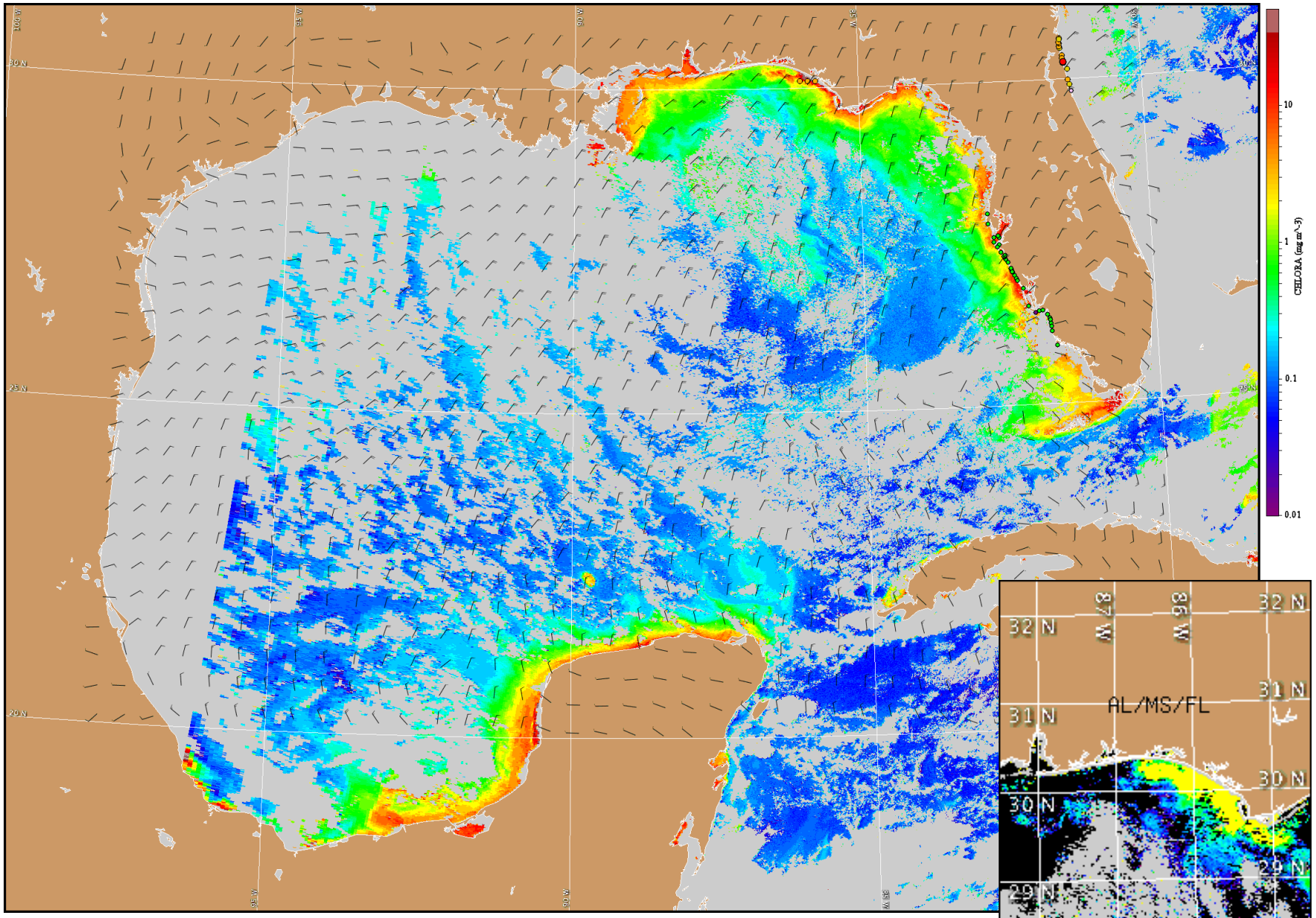
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 24 to 27 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

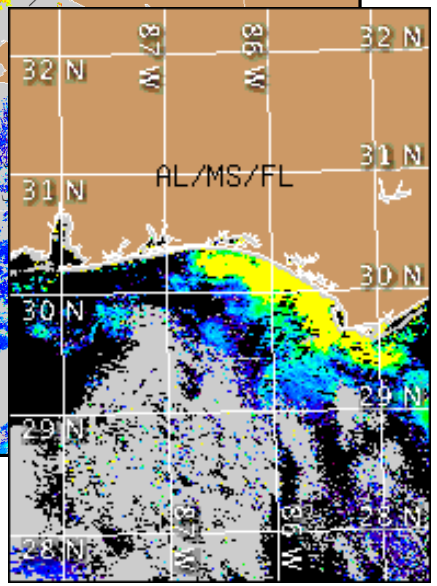


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

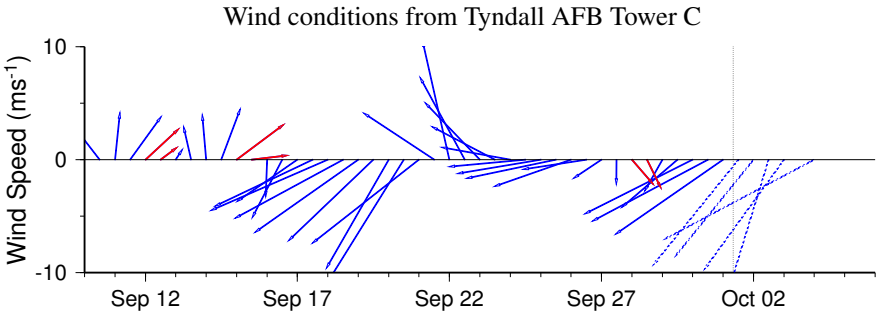
NW Florida: Northeasterlies today and Tuesday (15-20 kt, 8-10 m/s). Easterlies on Wednesday (10-15 kt, 5-8 m/s).



Satellite chlorophyll image and forecast winds for October 2, 2007 12Z with Cell concentration sampling data from September 24 to 27 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).


Wind conditions from Tyndall AFB Tower C
Wind Speed (ms-1)
10
0
-10
Sep 12
Sep 17
Sep 22
Sep 27
Oct 02